Comparing Therapeutic Factors in Group CBT and Group Analytic Psychotherapy

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ABSTRACT

The current study compared therapeutic factors (TFs) in Group CBT and Group Analytic Psychotherapy considering the duration of therapy (less than one year or more than one year). The individual scores on four global TFs, namely Instillation of Hope, Secure Emotional Expression, Awareness of Relational Impact and Social Learning were measured by deploying the TFI-19 questionnaire. The sample comprised n=180 members of Group Therapy settings. A 2x2 Factorial Independent Measures ANOVA was deployed to test the differences. Both type and duration of Group Therapy demonstrated a statistically significant effect on all four TFs, where members of Group Analytic settings and members with more than one year participation scored higher. However, the small effect size of Group therapy type on the TFs scores underlines that confounding variables and therapy-specific factors intervene. On the contrary, the medium effect size of the therapy duration on the TFs elucidates that increased curative outcomes are expected over time. No interaction effect was found between type and duration of group therapy. Further research should consider an alternative research design enabling the integration of the Common Factors theory and the Empirical Supported Treatment approach in a new TFs model.

Keywords: group therapy, therapeutic factors, group analysis, Group CBT, TFI-19

INTRODUCTION

Group therapy is recognized as an effective and powerful agent for psychological change, hereinafter defined as a complex process of altering individuals' dysfunctional thought patterns, emotional status and behaviour towards personal growth and self-improvement (Kivlighan et al., 2019; Yalom & Leszcz, 2005). While the group process offers a dynamic potential to tackle various physical and mental health problems and to improve personal psychosocial well-being, it also counts as a secure social laboratory for developing social skills, empathetic understanding, and a sense of belonging (Yalom & Leszcz, 2005). For many years group researchers and theorists have attempted to provide

evidence on the curative outcomes and results of various forms of group therapy. Their focus was on which therapeutic factors (TFs) operate in group therapy towards psychological change (Kivlighan & Kivlighan, 2014). In this context group cohesiveness. therapeutic alliance, instillation of hope, secure emotional expression, social learning, empathy and support, acceptance, sense of belonging, getting feedback from others, etc. defined a wide spectrum of group-specific TFs. However, the heterogeneity of TFs introduced a controversial debate, which drew the distinction between common or universal TFs and specific TFs. While common TFs are supposed to apply in all psychotherapeutic approaches and contexts, regardless the deployed techniques and methods, specific TFs are believed to promote psychological change owed to the therapeutic-specific approaches and interventions (De Felice et al., 2019).

Historical evolution of TFs in Group Therapy

Historically, Saul Rozenzweig (1936) first speculated that all scientifically validated therapeutic approaches deliver equally efficient outcomes. Hence, he pointed out that common unverbalized factors, such as the training and the personality of the the client-therapist therapist, relation (therapeutic alliance). but also the consistency of the psychotherapeutic setting is more important than specific features of therapeutic approaches, the including methods and interventions. Inspired by the imaginary character of Dodo in Alice in Wonderland, Rosenzweig supported that all psychotherapies "have won and they all must have prizes" (Rosenzweig, 1936, p.412). This statement is well known as the Dodo bird verdict and stresses that common factors such as empathy, catharsis. therapeutic alliance, etc. are more effective in promoting psychological change and improvement than therapeutic-specific psychodynamic features such as interpretations, CBT-related techniques or mindfulness-based interventions (Luborsky 2002). Evidence shows et al., that approximately up to 70% of the variance of therapeutic outcomes can be explained by common factors, while only 5% - 15% by specific factors (De Felice et al., 2019). However, the debate about the Dodo bird verdict remains controversial and challenging.

S.H. Foulkes (2018), who in the late 1940's founded Group Analysis as a novel form of Group Therapy, indicated the presence and operation of supporting TFs in the group process. Considering the group as a whole Foulkes described six group-specific TFs, which are socialization through the group, the mirror phenomenon, the condenser phenomenon, the chain phenomenon – free discussion, association information exchange and the Group as a forum (Foulkes, 2018). However, Foulkes' insight into the inherent mechanisms that promote psychological change derived from participative observations within the group therapy setting as well as from interviews with the group members without any deployment of psychometric tools that could TFs assumptions. validate his Thus. Foulkes' proposal on TFs incorporates methodological bias, insofar the collection evidence is based on individual of interviews or observations. that underestimate the relational interactions between the group members as well as the interactions between group members and the conductor (Kivlighan & Kivlighan, 2014).

The novel work of Yalom and Leszcz (2005) aimed at addressing the group members' experiences on what they find helpful and important in the group process. Acknowledging that therapeutic change is a complex process that reflects different aspects of human experience, Yalom and Leszcz (2005), first attempted to understand systematically empirically and the underlying universal mechanisms in group therapy. In this context their work followed the Common Factors Theory as postulated by Rosenzweig (1936). They considered

that only few studies delivered measurable results and evidence-based outcomes on the efficiency of group therapy (Vlastelica, Pavlović & Urlić, 2003). In fact, qualitative methods such as observation and individual interviews prevailed for long, while an non-systematized unstructured and identification of TFs intervened between general theory and poor empirical practice of Group Therapy. The inherent inabilities to measure the benefits and the therapeutical outcomes triggered Yalom and Leszcz to address more precisely the different TFs and their interdependencies, but also their dynamics in terms of improving the mental function of the patients, the fading of their symptoms, the integration of the self and, finally the desired behaviour change (Yalom & Leszcz, 2005).

To measure members' perceptions Yalom and Leszcz (2005) developed the 11 TFs inventory. This inventory introduced a thorough approach in understanding the primary and common agents of psychological change regardless of the type of therapy and other associated features. The 11-TFs inventory comprises 11 common factors, namely instillation of hope, universality, imparting information, altruism, the corrective recapitulation of the primary family group, development of socializing techniques, imitative behavior, interpersonal learning, group cohesiveness, catharsis, and existential factors (Yalom & Leszcz, 2005). Undoubtedly, the addressed TFs are not in reality isolated from each their presence and other. evolution throughout the group process engages a mutual interplay between them, while each factor displays a specific weight in terms of impact on the therapeutic outcomes. Interestingly each TF creates an abstract therapeutic construct that can be measured according to the experience of the group members by completing an extensive questionnaire (Yalom & Leszcz, 2005). Not only the production of robust data and figures, but also changing the angle of view from a therapist-subjective to a patient-rated

appraisal of TFs clearly underlines the innovation of Yalom's attempt.

Although Yaloms' universal proposal influenced group moderators and researchers, the broad conceptual spectrum of the addressed TFs, their thematic overlapping and the extensive measurement tool created a fragmented and unsound field that openly questioned its validity. reliability and usability (Joyce et al., 2011). The key weaknesses of Yalom's 11 TFs scale include that factors are overlapping in terms of content, and they seem to apply in a wide range of scope, while the long number of items makes the questionnaire unattractive for participants, and thus increases significantly the risk of drop out (DeLucia-Waack, Kalodner, & Riva, 2013). Although the 11 TFs inventory has been empirically tested and psychometrically validated its mentioned weaknesses and limitations led scholars to the development of shorter, user friendlier and contextspecific TFs questionnaires (DeLucia-Waack, Kalodner & Riva, 2013).

The evolution of TFs in group therapy engages the study of single and multiple factors. While single TFs approaches underline and condense changes with the identification of an essential, single TF, multiple TFs approaches propose the interplay between different TFs. Castonguay and scholars (1998) addressed emotional experience as single TF in group CBT for binge eating disorder. They focused on the way clients experienced the group climate and their positive or negative feelings, concluding that emotional expression operates as effective TF in group CBT. Similarly, Budman and his colleagues (1993), inspired by the work of Yalom, isolated and studied the role of cohesiveness in group therapy. They concluded that cohesiveness depends on the developmental stages of the group.

On the other side researchers have identified categories or clusters of group-specific TFs that operate in a mutual way. Kivlighan and scholars (1996) based on the evaluations of clients on what is helpful and has an impact

on their mental state, delineated four global TFs that operate in group therapy. These Awareness-Insight, engage Emotional Relationship-Climate, Other Versus Self Focus and Problem Solving-Behavior Change. Another approach, proposed by Dierick and Lietaer (1998) stresses a twodimensional aspect of underlying TFs. The first dimension, called Relational Climate refers to factors such as acceptance by the others, confidence in the relation to the group conductor and relations to the other group members. The second dimension Psychological called Work comprises factors such as recognizing the transference reactions of others, self-insight and progress monitoring within the course of therapy. Similarly, Johnson and scholars (2005) examined four critical TFs relationship constructs, that include empathy, group climate, cohesion of the group and working alliance. Interestingly, the researchers linked the four relationship constructs to different types of relating, namely between the group members, between the members and the group and, finally, between the group members and the group therapist.

The Therapeutic Factors Inventory–19 (TFI-19)

Contemporary research on measuring the TFs in Group Therapy demonstrates psychometrically validated and shorter questionnaires that can be circulated to group members as self-reporting tools. Phan et scholars (2004) developed the Group Dynamic Inventory that consists of three global TFs, namely altruism, universality and group cohesiveness. They declared that TFs are in reality interdependent, but technically for developing the psychometric TFs have been structure, managed separately. Based on their results, group cohesiveness seems to be the key TF, which operates as the precondition for the optimal function of the other two factors.

The most promising model for evaluating TFs in the group work is the *Therapeutic Factors Inventory–19* (TFI-19) developed by MacNair-Semands and her colleagues

(2010). Compared to other existing evaluation tools the TFI-19 incorporates strong psychometric development, provides evidence on construct analysis and is more user-friendly for administration to researchers, psychotherapists and patients (DeLucia-Waack, Kalodner, & Riva, 2013). The TFI-19 indicates a self-reporting measure that assesses individual group members' perceptions of the presence of four common therapeutic factors. The first TF is Instillation of Hope, which refers to a feeling of optimism that things will go better in the future and on this basis, it increases the active participation and the engagement of the members in the group. The second TF is the Secure Emotional *Expression*, which means a feeling of safety and trust for self-disclosure and emotional expression. The Awareness of Relational Impact constitutes the third TFI of the TFI-19 inventory and refers to the insight in the interactions, personal emotions, group thoughts, fantasies and associated behaviours. Last but not least, the fourth TF is Social Learning, which focuses on the cultivation and development of life and social skills as a result of the group process (Joyce et al., 2011).

The developers of the TFI-19 underline that all TFs mature as the group therapy process evolves (MacNair-Semands, 2010). More specifically, it is assumed that TFs increase their presence and importance over time in group therapy settings, indicating that the underlying mechanisms that lead to therapeutic change are time-sensitive. Mackenzie (1990) pointed out that in the early phases of the group process hope and universality contribute to the development of a sense of belonginess, acceptance and faith for personal improvement. Both hope and universality comprise integral parts of Instillation of Hope, where it is assumed that this TF grows and emerges stronger as the group members acknowledge the universal nature of the problems and deficits and therefore, they have faith in the group therapy outcomes.

Similarly, research evidence demonstrates that Secure Emotional Expression derives from the open, non-violent and honest interaction between the group members. Self-disclosure of personal experiences, emotions and information increases over time. insofar trust relations and interpersonal communication evolves in the group (MacNair-Semands, 2010). Having said that, the TF Awareness of Relational Impact also follows a time-growing maturation, considering that members receive creative feedback and mirroring in later phases of the group process (Kivlighan et al., 1996). The fourth TF Social Learning is found to be the most difficult to mature, because it requires strong engagement and productive interactions that support the development of active listening, empathetic understanding, social skills, etc. (MacNair-Semands, 2010).

Group CBT versus Group Analysis

Empirical evidence on CBT Group Therapy shows important therapeutic outcomes for individuals who face anxiety disorders or depression (Wolgensinger, 2022). A survey on TFs with patients in CBT Group Therapy treatment of social for the phobia demonstrated that patients who had an important improvement in their mental condition evaluated higher the TFs of learning-output, interpersonal guidance. universality group cohesiveness and compared to patients who did not improve their status of social phobia (Choi & Park, 2006). For the Group CBT process some TFs are less important, for example "corrective recapitulation of the primary family group" compared to group cohesion and task focus (Whitfield, 2010).

Another study on the outcomes of CBT Group Therapy for patients with anxiety disorders, reported that seven TFs were evaluated as significantly helpful for the patients. These factors involved altruism, interpersonal learning/input, guidance, identification, family re-enactment, selfunderstanding, and existential factors (Behenck et al., 2017). Likewise, a study on TFs in groups with Mindfulness-Based Intervention CBT deployed the TFI-19 inventory and reported in the eighth week the mean scores of the four TFs measured on a 6-point Likert scale (Canby et al., 2021). Instillation of Hope displayed the highest score (M = 5.58, SD =1.13), providing evidence for its prevalence. Secure Emotional Expression was reported in the second place (M = 5.21, SD = 0.96). Interestingly, Social Learning, which is supposed to mature more difficult compared to the other TFs, was evaluated in the third place (M = 4.32, SD = 1.18), while Awareness of Relational Impact demonstrated the comparably lowest score (M = 4.30, SD = 1.32).

While group CBT follows a well-structured approach and provides psychoeducation on techniques for alleviating negative impairments emotions, relational and dysfunctional thought patterns, the Group Analytic point of view encompasses a more philosophical perspective of the human behaviour and therefore usually targets a global change (Baardseth et al., 2013). Considering that human beings are "political animals" (Bion, 2013, p. 53) Group Analysis attempts to support global psychological change bv elaborating techniques and interventions based on the legacy of Psychoanalysis (Foulkes, 2018), the Object-Relations Theory (Lorentzen, and recently the 2022) Relational Psychotherapy (Billow, 2017). A research project reported that the duration of the therapy (up to 1 year and 1-3 years) in Group Analytic settings indicated significant differences in TFs (Vlastelica, Pavlović & Urlić, 2003). Participants with up to 1 year group therapeutic experience scored higher on catharsis, instillation of hope, existential factors and family reenactment. TFs increase or decrease their importance depending on the duration of the group work. Comparably, Lorentzen (2022) supported that instillation of hope, altruism and universality, the so called "supporting factors" are especially important in the early

stages of the group work, where uncertainty is dominant for the members.

The impact of TFs also depends on the type, the group size, the group stage and the socio-demographic features of group analytic participants (Lorentzen, 2022). A study on patients ranking of TFs in Group Analysis reported that self-understanding was the highest evaluated factor, while identification was the least important factor (Vlastelica, Pavlović & Urlić, 2003). In the same study scholars found significant differences in the scores of the TFs which were dependent on age, sex, educational attainment. prior psychotherapeutic experience and duration of the therapy. Interestingly women scored higher on all TFs, except on family re-enactment.

The scientific bibliography lacks on research with a focus on the comparison of TFs scores between different group therapy approaches. Additionally, only few studies emphasize the impact of the therapy duration on the scores of TFs. In other words, it remains an interesting research question to what extent TFs in group therapy change over time (Lorentzen, 2022). To bridge this research gap, the current study aimed at testing differences between four TFs, namely Instillation of Hope, Secure Emotional Expression, Awareness of Relational Impact and Social Learning by deploying the TFI-19 and considering also the duration of therapy.

Two independent variables (IV) were integrated in the total research design. The first IV was the type of Group Therapy, which hereby represented CBT or Group Analysis, while the second IV was the duration of being in the group therapy process, which comprised two levels, namely less than one year or more than one year. The underlying assumption stated that the two directions of Group Therapy (CBT and Group Analysis) deploy different therapeutic techniques design, and interventions that impact the presence of the four TFs. Furthermore, it has been assumed that patients who attend less than one year group therapy sessions will evaluate the presence of the four TFs differently than group members who participate in the group therapy process for more than one year. Having said that, an interaction effect between type and duration of group therapy defined the third research hypothesis. The identification of highly evaluated TFs in relation to the afore mentioned variables can support therapists for deciding which TFs can be emphasized in order to achieve the best outcomes for their patients (DeLucia-Waack, Kalodner & Riva, 2013).

MATERIALS & METHODS

Design

The study deployed a between-subjects research design (independent measures), dependent involving one and two independent variables. To begin with, the dependent variable comprised the individual scores of the four therapeutic factors, namely Instillation Hope, of Secure Emotional Expression, Awareness of Relational Impact and Social Learning. TFs scores were measured on a metric scale. Next, the first independent variable (IV1) addressed the type of group therapy approach, with two levels, namely CBT and Analytic approach. IV1 Group was measured on a nominal scale. The second independent variable (IV2) addressed the duration of attending group therapy, with two levels, namely less than one year and more than one year. Similarly, IV2 was measured on a nominal scale.

Three research hypotheses have been formulated and tested within the scope of this research project. Hypothesis 1 stated that there will be significant differences between the TFs scores of individuals in Group CBT and Group Analysis. Hypothesis 2 declared that there will be significant differences in the TFs scores between the individuals who participated less than one year in the Group Therapy process and individuals who participated more than one year in the Group Therapy process. Finally, Hypothesis 3 stated that there will be a significant interaction effect between type and duration of group therapy

on the members' perceptions of the presence of the TFs.

Participants

In order to reach out the participants an invitation to the survey was sent via email to accredited Group Therapeutic Institutes in Greece, involving the Institute of Behaviour Research and Therapy (IBRT), the Hellenic Society for Group Analysis and Family Therapy and the Hellenic Organization of Psychotherapy and Education in Group Analysis (HOPE in GA). Additionally, the database of the National Association of Psychotherapy of Greece (NOPG) was utilized to reach out group therapists with specialization in Group CBT or Group Analysis, who were in turn asked via email to forward the survey link to their group members.

Inclusion criteria concerned individuals who were attending group therapy sessions either CBT or psychodynamic setting. in Exclusion criteria comprised individuals with severe mental health illness in the spectrum of psychosis, individuals with low level of personality organization and individuals who recently experienced a critical life event (loss, trauma, critical incident, etc.). The exclusion criteria were clearly stated in the invitation letter / first page of the online questionnaire.

Using G*Power (Mayr, Erdfelder, Buchner & Faul, 2007), it's been calculated that a total sample size of at least 172 individuals was required for a medium effect size (0.5), giving the study a power of 0.9. The allocation ratio between the two groups was 1 (N2/N1), which assigned 86 individuals in Group CBT and 86 individuals in Group Analysis. Considering the second independent variable (duration of group therapy) from each group 43 individuals had to be less than one year in therapy and 43 individuals more than one year.

Materials

To measure the underlying TFs, the *Therapeutic Factors Inventory*–19 (TFI-19) was administered. The TFI-19 inventory is a

self-reporting tool that gives insight into the members' experiences on group the importance of four TFs that are present in the group process. More specifically, the four TFs that are measured by the tool are Instillation of Hope, Secure Emotional Expression, Awareness of Relational Impact and Social Learning. Therefore, the TFI-19 comprises in total 19 questions all measured on a Likert scale from 1 (*Strongly Disagree*) to 7 (Strongly Agree). Technically, to calculate the score for each participant, each of the four TFs was calculated as a sum of the 19 items ratings, where each item rating was multiplied with a specific factor weight. Furthermore, four socio-demographic questions were created and integrated in the first part of the questionnaire. These aimed at gaining information on the age, sex, type of group therapy (CBT or Group Analysis) and duration of the therapy (less than one year or more than one year). All four questions were closed-ended, providing participants predetermined answers that had to be selected. The questionnaire was transposed to an online questionnaire using Google Forms. Data analysis was elaborated using the IBM SPSS Statistics 26 and the MS Excel 2017.

Procedure

Participants were invited to complete the online questionnaire "Therapeutic Factors Inventory–19" (TFI-19). At the beginning, individuals had to review the first page of the questionnaire gaining brief information on the rationale and overall scope of the research as well as on what is expected from them during the survey. Additionally, participants had to read a short text about the use of their data and their rights, underlining that the General Data Protection Regulation (GDPR) guidance for research was followed along all phases of the research project. Before accessing the questionnaire participants had to read and accept the consent form and to create a personal anonymity code in case they retroactively wanted to contact the researcher for withdrawing their consent.

For creating the personal anonymity code the provided guidelines noted to write the last three letters of their surname and the last three digits of their phone number.

After completing the technical requirements for participating in the survey, participants first part of entered the the core questionnaire which involved sociodemographic questions, e.g. age, sex, type of group therapy and duration being in therapy. Then, they accessed the second part of the questionnaire which involved the TFI-19. For both parts of the questionnaire concrete and precise instructions were provided to participants. By completion of the questionnaire participants had to read a short debriefing giving them extra information on the key research topic and the overall scope of the survey. Finally, they were thanked for their participation, and reminded about the contact details of the researcher and the research supervisor so that they could ask any questions or request a data withdrawal.

Strengths and limitations

The applied methods presented strengths and limitations. To begin with, a key strong point refers to the circulation of the questionnaires by selecting accredited training institutes for Group Analysis and CBT. Additionally, the use of the standard Therapeutic Factors Inventory-19 warranted high reliability and validity, then it has been psychometrically tested and validated by other studies (MacNair-Semands et al., 2010). Regarding limitations, one weak point was the lack of control over the participants and their mental health status as stated in the exclusion criteria. Another limitation of the methods was the online administration of the questionnaire, which eventually excluded participants with low digital competences.

RESULT

The final sample comprised n = 180individuals. More specifically, the sample structure included 90 members from Group CBT and 90 members from Group Analytic settings, while from each type of Group Therapy 45 participants had been attending less than one year therapy sessions and 45 participants more than one year. Participants comprised 41.1% males and 58.9% females. With regards to the age structure of the sample, 12.2% represented the age group 18-29, 39.4% the age group 30-39, 28.3% the age group 40-49, 16.7% the age group 50-59 and, finally, 3.3% represented participants over 60 years old.

The calculation of the four TFs followed the scoring key proposed by the developers of the TFI-19. The initial data screening process indicated for each of the four TFs outliers, which were managed according to the Winsorization approach (Kwak & Kim, 2017). The scope of deploying the Winsorization approach was neither to eliminate nor to replace the outliers, but rather to decrease their influence by modifying their values considering the maximum value in the upper/lower fence. Nevertheless, in line with the Central Limit Theorem and considering the large sample size (n > 30), the metrical scaled TFs and the independent measures design (stochastically independent random variables), the criteria for a normal distribution of the TFs scores were met (Islam, 2018). Additionally, Levene's Test of Equality was non-significant (p > .05) for each of the four dependent variables, indicating that the variances between their groups were equal, enabling the deployment of parametric tests.

For testing the research hypotheses, a 2x2 Factorial Independent Measures ANOVA was deployed. The results for each TF are demonstrated in the following.

Table 1: Mean numbers of Instillation of Hope (with standard deviations) by type and duration of Group Therapy.

	Less than one year	More than one year	Total
Group Analysis	5.30 (0.68)	5.90 (0.67)	5.60 (0.74)
Group CBT	4.61 (0.74)	5.44 (0.60)	5.03 (0.79)
Total	4.96 (0.79)	5.67 (0.67)	

There was a significant main effect of Group Therapy type, F(1, 176) = 32.07, p < .0001, partial $\eta^2 = 0.154$ (15.4%) demonstrating that members of Group Analysis evaluated higher Instillation of Hope than members of Group CBT. There was also a significant main effect of duration of treatment, F(1, 176) = 49.47, p < .0001, partial $\eta^2 = 0.219$ (21.9%) indicating

that participants with more than one year presence within a Group Therapy setting scored higher on Instillation of Hope than members with less than one year therapeutical experience. There was no significant interaction between Group Therapy type and duration of treatment F(1,176) = 1.36, p = .245, partial $\eta^2 = 0.007$ (0.7%).

Figure 1: Interaction effect between duration and type of treatment on Instillation of Hope.

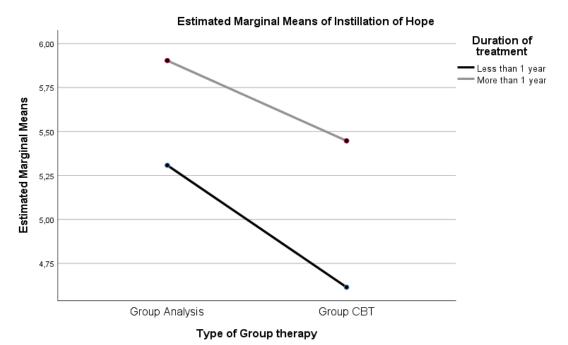


Table 2: Mean numbers of Secure Emotional Expression (with standard deviations) by type and duration of Group Therapy.

	Less than one year	More than one year	Total
Group Analysis	3.39 (0.44)	3.79 (0.411)	3.59 (0.47)
Group CBT	2.96 (0.49)	3.52 (0.35)	3.24 (0.51)
Total	3.18 (0.51)	3.66 (0.67)	

There was a significant main effect of Group Therapy type, F(1, 176) = 29.32, p < .0001, partial $\eta^2 = 0.142$ (14.2%) demonstrating that members of Group Analysis evaluated higher Secure Emotional Expression than members of Group CBT. There was also a significant main effect of duration of treatment, F(1, 176) = 56.22, p < .0001, partial $\eta^2 = 0.242$ (24.2%) indicating

that participants with more than one year presence within a Group Therapy setting scored higher on Secure Emotional Expression than members with less than one year therapeutical experience. There was no significant interaction between Group Therapy type and duration of treatment F(1, 176) = 1.64, p = .202, partial $\eta^2 = 0.009$ (0.9%).

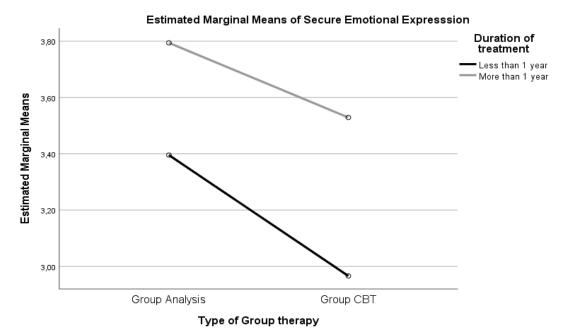


Figure 2: Interaction effect between duration and type of treatment on Secure Emotional Expression.

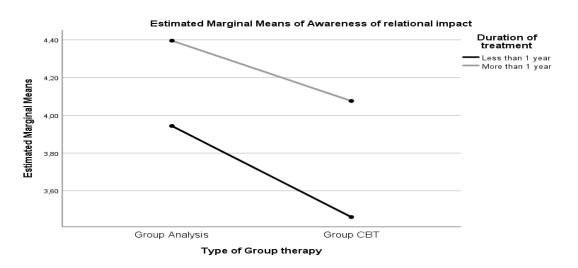
Table 3: Mean numbers of Awareness of relational impact (with standard deviations) by type and duration of Group Therapy.

	Less than one year	More than one year	Total
Group Analysis	3.94 (0.52)	4.39 (0.47)	4.16 (0.54)
Group CBT	3.46 (0.53)	4.07 (0.41)	3.70 (0.57)
Total	3.70 (0.57)	4.23 (0.47)	

There was a significant main effect of Group Therapy type, F(1, 176) = 30.20, p < .0001, partial $\eta^2 = 0.146$ (14.6%) demonstrating that members of Group Analysis evaluated higher Awareness of relational impact than members of Group CBT. There was also a significant main effect of duration of treatment, F(1, 176) = 53.44, p < .0001, partial $\eta^2 = 0.232$ (23.2%)

indicating that participants with more than one year presence within a Group Therapy setting scored higher on Awareness of relational impact than members with less than one year therapeutical experience. There was no significant interaction between Group Therapy type and duration of treatment F(1, 176) = 1.24, p = .265, partial $\eta^2 = 0.007 (0.7\%)$.

Figure 3: Interaction effect between duration and type of treatment on Awareness of relational impact.



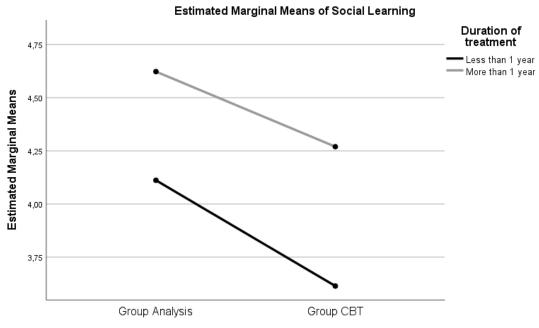
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Table 4: Mean nur	nbers of Social L	earning (with standar	d deviations) by type a	nd duration of Group Therapy.

	Less than one year	More than one year	Total
Group Analysis	4.11 (0.50)	4.62 (0.49)	4.36 (0.56)
Group CBT	3.61 (0.55)	4.26 (0.43)	3.94 (0.59)
Total	3.86 (0.58)	4.44 (0.49)	

There was a significant main effect of Group Therapy type, F(1, 176) = 32.78, p < .0001, partial $\eta^2 = 0.157$ (15.7%), demonstrating that members of Group Analysis evaluated higher Social Learning than members of Group CBT. There was also a significant main effect of duration of treatment, F(1, 176) = 61.68, p < .0001, partial $\eta^2 = 0.259$ (25.9%), indicating that

participants with more than one year presence within a Group Therapy setting scored higher on Social Learning than members with less than one year therapeutical experience. There was no significant interaction between Group Therapy type and duration of treatment F(1, 176) = .94, p = .333, partial $\eta^2 = 0.005$ (0.5%).



Type of Group therapy

Figure 4: Interaction effect between duration and type of treatment on Social Learning.

DISCUSSION

The present study investigated differences in common TFs based on type and duration of Group Therapy. The research design included four common agents for psychological change, namely Instillation of Secure Emotional Expression, Hope, Awareness of Relational Impact and Social Learning, which are supposed to be present in all group therapy trajectories regardless of the psychotherapeutic school of thought and the deployed interventions (Joyce et al., 2011). To measure and compare the differences of the aforementioned TFs the

TFI-19 questionnaire was administered to members Group CBT and of Psychodynamic approach. The results showed that members of Group Analysis evaluated greater the presence of all four TFs compared to Group CBT members, while group members with more than one year attendance of group psychotherapy sessions perceived higher the presence of the four TFs compared to group members with less than one year attendance. Interestingly, the ranking of the four evaluated TFs seems to follow the same

trajectory in both types of group therapy as well as with regards to therapy duration.

To begin with, the results indicated that there is a statistically significant effect of the Group Therapy type on the TFs, where it was found that members of Group Analytic settings evaluated higher the presence of all four TFs compared to the members of the Group CBT. Thus, Hypothesis 1, which stated that there will be significant differences between the TFs scores of individuals in Group CBT and Group Analysis, was accepted. However, the small effect size of group therapy type on the presence of TFs raises further questions about rejecting the null hypothesis. This consideration is strongly supported by previous meta-analysis findings which showed that CBT-specific treatments for anxiety and depression do not deliver superior or inferior treatment outcomes compared to other bona fide psychotherapeutic approaches (Baardseth et al., 2013). This critical finding is further discussed per TF in the following, attempting to gain insight into the relation between the Common Factors perspective 2014) (Laska et al.. and the psychotherapeutic-specific approach as well as into the potential mediation of other hidden variables.

Results also demonstrated a statistically significant effect of the duration of the therapy on the TFs scores, where it was found that group members with more than one year participation in Group Therapy evaluated higher the presence of all four TFs compared to the group members who attended less than one year group therapy Consequently, Hypothesis sessions. 2. which declared that there will be significant differences in the TFs scores between the individuals who participate less than one year in the Group Therapy process and individuals who participate more than one year, was also accepted. Interestingly, the calculation of the effect size of the duration of group therapy displayed a medium size, which underlined that indeed the presence of global TFs matures over time in group therapy settings. This finding is also supported by previous research, that eminently pointed out sensitivity to change in terms of a stepwise maturation of the four TFs across therapy sessions, from the early developmental phases of the group to the more matured that reflect stronger group cohesion (Canby et al., 2021; Joyce et al., 2011).

Finally, no statistically significant interaction effect between the type and the duration of the group therapy was addressed. Thus, *Hypothesis 3*, which stated that there will be a significant interaction effect between type and duration of group therapy on the members' perceptions of the presence of the TFs, was rejected.

Instillation of Hope

Instillation of Hope displayed the highest score among the four TFs for both group CBT and psychodynamic participants. This finding is in line with a previous research project, that deployed the TFI-19 in short term groups and reported that Instillation of Hope was evaluated by the members as the most present and important factor (Canby et al., 2021). Likewise, Vlastelica and scholars (2003) administered the 11 TFs inventory of Yalom to members of Group Analysis and reported that Instillation of Hope was placed on the third rank, after self-understanding re-enactment. Additionally. and family and his colleagues Joyce (2011)implemented the TFI-19 inventory in short term groups and concluded a comparably higher score, which also emerged as a strong predictor for the post-treatment condition on interpersonal distress, anxiety and depression.

The results of this survey demonstrated apparently that Instillation of Hope increases over time for both group CBT and psychodynamic members. This finding is also in consistency with the research results by MacNair-Semands et scholars (2011), who claimed that Instillation of Hope is initially cultivated in the early stages of the group in terms of engagement and then, insofar group members observe that other

participants are improved, is further enhanced, creating a stronger feeling of belonging and more confidence for the future.

An interesting difference in the TFs scores, as illustrated in Table 1, underlines that this TF increases over time greater for the group CBT members than for the members of Group Analysis. This might be associated with the overall metapsychological tenets of the CBT approach, which is more instrumental, target-oriented and structured, contrary to the psychodynamic approach, which shares an open and non-guided interaction pattern and hence puts emphasis on the relations between the members, between the members and the conductor as well as between the members and the group as a whole (Foulkes, 2018; Whitefield, 2010). Consequently, Instillation of Hope is activated earlier in Group Analysis and matures slowly over sessions, while in group CBT it follows a progressive trajectory over the months, insofar as the conductor prompts interactions and instils optimism and positive expectations.

Secure Emotional Expression

The scores on Secure Emotional Expression displayed differences on type and duration of group therapy. Nevertheless, its presence demonstrated the lowest score among the four TFs. To this end, the comparison with the internal benchmark, namely the other three TFs, as well as with the external benchmark, e.g. the results from similar TFI-19 studies, introduces enquiries and points of discussion.

The studies of Candy et scholars (2021) as well as the measurements conducted by Joyce and his colleagues (2011) reported greater scores on Secure Emotional Expression, indicating that the extent to which a member feels secure and comfort in the group associates with open and honest interactions within the group. Hence it is assumed that higher scores on Secure Emotional Expression relate to selfdisclosure and transparency (Yalom & Leszcz, 2005). In this context, the low scores reported in the current project indicate a weak group cohesion in both CBT and psychodynamic approach, especially for those with less than one year of operation (Kivlighan et al., 2014). However, in consistency with prior studies Secure Emotional Expression increases significantly after the first year of therapy (Kivlighan et al., 2019).

Awareness of Relational Impact

Awareness of Relational Impact was perceived by the group members as the third present TF, after Instillation of Hope and Social Learning. Notwithstanding the third position, Awareness of Relational Impact displayed a score which is very close to Social Learning. This finding is also in consistency previous with research (Kivlighan et al., 2019), that concluded that group cohesion impacted on the evolution of interpersonal awareness and social learning session to session, where the measured scores of the two aforementioned TFs demonstrated almost the same median and standard deviation. Other studies also concluded the high importance of relational awareness, delivering evidence that it comprises components of vertical relations, namely the relationship between the members and the conductor, horizontal relationships, which refers to the relational patterns between the members, and last but not least, the quality of the relations (Burlingame et al., 2011). Within this context, group moderators are recommended to enhance interactions members. between the to interpret problematic relational patterns and to enable a secure and safe group climate.

According to the results, members of Group Analytic settings evaluated higher Awareness of Relational Impact compared to group CBT members. One explanation for this difference, might be that the drive to gain insight into the inner self, including conscious awareness of the personal feelings, emotions, thoughts and phantasies seems to play an important role for psychodynamic treatment. As reported by

Vlastelica and scholars (2013),who administered Yalom's Inventory to members of psychodynamic group therapy settings, the conscious awareness of emotional and relational impact is strong the factors Selfconnected to of understanding as well as to Family Reenactment, which both provided the higher scores among the 11 global TFs. On the contrary, in group CBT treatments the role of exploring maladaptive family-specific relational patterns is from less importance, considering that the emphasis is more on the observation of others and on deploying new styles of interacting (Whitefield, 2010).

Like Instillation of Hope and Secure Emotional Expression, so Awareness of Relational Impact increases over time, which is in consistency with previous research (Kivlighan et al., 1996; Joyce et al., 2011). Thus, the insight to personal thoughts, feelings, emotions and experiences requires a significant volume and depth of interpersonal interactions and therefore matures slower over the sessions (Joyce et al., 2011).

Social Learning

Social Learning was perceived by both group CBT and psychodynamic participants as the second present TF, after Instillation of Hope. Acknowledging that Social Learning comprises in principle the cultivation and development of skills related to active listening, empathetic understanding, interpersonal communication, respect of the others and self-insight, its presence in the group sessions seems to play a crucial role (Yalom & Leszcz, 2005). Similar projects delivered evidence that Social Learning in Group Therapy contributes not only to the acquisition of information in terms of ideas, thoughts, phantasies, experiences and facts expressed by the other members, but also to the elaboration of self-insight, supported by the observations, the feedback and the comments provided by the group members, which in turn contributes to better behavioural adaptation and psychological change (Forsyth et al., 1999). From this point of view, it is reasonable that the scores of Social Learning and Awareness of Relational Impact reflect an almost common perception of the participants, suggesting that the interplay between these factors affects the group cohesion (Kirchmann et al., 2009).

The results also showed that Social Learning increases its presence as contextual factor over time. then participants who attended group therapy sessions for more than twelve months reported higher scores in comparison to participants with less than one year participation in group therapy sessions. This finding is consistent with previous findings (Budman et al., 1993; Joyce et al., 2011; Kirchmann et al., 2009), suggesting that interpersonal interactions become deeper and occur more frequently as sessions evolve and Instillation of Hope has been already established (Kivlighan et al., 2019).

Is the *Dodo bird verdict* misleading?

The addressed differences in all TFs scores between Group CBT and Group Analysis participants can be critically interpreted under the light of the Common Factors perspective (Laska et al., 2014), which assumes that psychological change and healing are socially supported and mediated by broad factors such as the hope for improvement, the relations to each other, the therapeutic alliance, the group cohesion, the secure emotional expression, etc. Having said that, the Common Factors perspective associates with the Dodo bird verdict (Rosenzweig, 1936), which theorizes that outcomes of every bona fide the psychotherapeutic intervention share efficiency. Under equally this light. therapeutic change owes neither to CBTspecific nor to psychodynamic-specific interventions and techniques, but rather to common factors.

In this context, the slightly different scores between the TFs addressed in this study raise critical questions about rejecting the null hypothesis of no differences. If so, the addressed differences in the TFs scores

might be intervened by other factors. Hence, one explanation about the higher scores of the group psychodynamic treatment could involve the fact that group CBT is in principle treatment-oriented and contains members who face the same difficulties or mental disorders. For example, previous studies on TFs with group CBT members reported that those groups focused on anxiety disorders or depression (Baardseth et al., 2013; Whitfield, 2010; Wolgensinger, 2022). Thus, the psychopathology status of the participants could explain the lower scores for the common TFs compared to Group Analytic approach, yet considering the time aspect, it indicates a positive evolution in terms of tackling the symptoms.

On the other side, the Group Analytic approach puts the emphasis more on the global change (Baardseth et al., 2013) and therefore is not usually focus-oriented to specific mental disorders. Previous studies on TFs with members of Group Analytic settings did not associate common factors to the psychopathology type of the participants but underscored the phases of the group process and the previous psychotherapeutic experience (Phan et al., 2004; Vlastelica et al., 2003).

Notwithstanding the dominance of the Dodo bird verdict, empirical studies support that approximately 70% of the outcome variance can be explained by common factors and only up to 15% by therapeutic-specific factors (De Felice et al., 2019). Additionally, there is strong evidence that common and specific TFs are intermingled and mutually evolved, so that the validity of common TFs questionnaires, including the TFI-19, can be openly challenged (Imel & Wampold, 2008). Thus, the Dodo bird verdict could be misleading (De Felice et 2019). Likewise, the Empirical al., Supported Treatment approach, which supposes that treatment owes to the theorydriven interventions and specific techniques presents conceptually constraints (Laska et al., 2014).

Limitations of the study

present study presented several The limitations. To begin with, the splitting of therapy duration in less or more than one year delivered significant differences in TFs scores, however it did not provide insight for underlying interim milestones that are present in the group process. Secondly, the solid measurement of the TFs according to subjective evaluations of the participants did not deliver information about the efficiency of treatment. Undoubtedly, the four TFs displayed evidence on how group dynamics evolve over time, however the results cannot justify a causal-effect relationship between high scores of TFs and efficiency of treatment. Thirdly, the online administration of the questionnaire might have excluded participants with low digital competences. Fourthly, there is a lack of recent research in the field, resulting in the weakness of interpreting comparably the findings. Lastly, for comparing the differences between TFs only the TFI-19 without was administered, further assessment of other common TFs, such as group cohesiveness and group climate or other therapeutic-specific factors.

Conclusions and further research

The current study delivered evidence that both type and duration of Group Therapy have a statistically significant effect on Instillation of Hope, Secure Emotional Expression, Awareness of Relational Impact and Social Learning. Members of Group Analytic settings and members with more than one year participation scored higher compared to members of group CBT settings. However, the small effect size of Group therapy type on the TFs scores underlined that other confounding variables such as mental health status of the participants, disorder-targeted therapy, short term term versus long groups and psychotherapy-specific approaches and techniques intervene. On the contrary, the medium effect size of the therapy duration on the TFs elucidates that increased curative outcomes are expected over time. No

interaction effect was found between type and duration of group therapy.

Further research on TFs in Group Therapy should consider the actual correlation between common and specific TFs. On this basis, an alternative research design should be developed, enabling the integration of the Common Factors theory and the Empirical Supported Treatment approach (therapyspecific factors) in a new TFs model that goes beyond the dilemma of common or specific TFs in Group Therapy and provides a multi-factorial insight on how group psychotherapy works. Additionally, future research should also include qualitative methods such as individual interviews with conductors and group moderators so as to gain insight into the treatment process.

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